

Physical Therapy & Exercise



- ❧ Purpose of Physical Therapy:
To guide you.
do,) to maximize your independence
and quality of life at all stages of
Parkinson's



- ❧ Purpose of exercise: To maintain as
much normal function and
independence as possible.
the work



Indication For Physical Therapy

VERY SIMPLE! A DIAGNOSIS OF PD

The sooner the better!
Better late than never!

Look for a physical therapist
who specializes in Parkinson's



Physical Therapy Evaluation

Tell us where your problem areas are and what
you want to focus on in therapy

	No Difficulty 1	Little Difficulty 2	Moderately Difficult 3	Much Difficulty 4	Extremely difficult 5	Unable (need help) 6	n/a
walking		X					
turns				X			
getting out of a chair			X				
getting out of the car			X				
getting in/out of bed		X					
rolling in bed		X					
getting up from the floor				X			

Physical Therapy Evaluation

- ❧ Objective measures (your baseline):
 - ❧ Strength, flexibility, balance & functional ability (walking/transfers)
 - ❧ Other medical problems? Arthritis, orthostatic hypotension, cardiac, neuropathy, cognition
- ❧ Determine the causes of your problems so they can be addressed in therapy safely yet effectively



Physical Therapy Can:

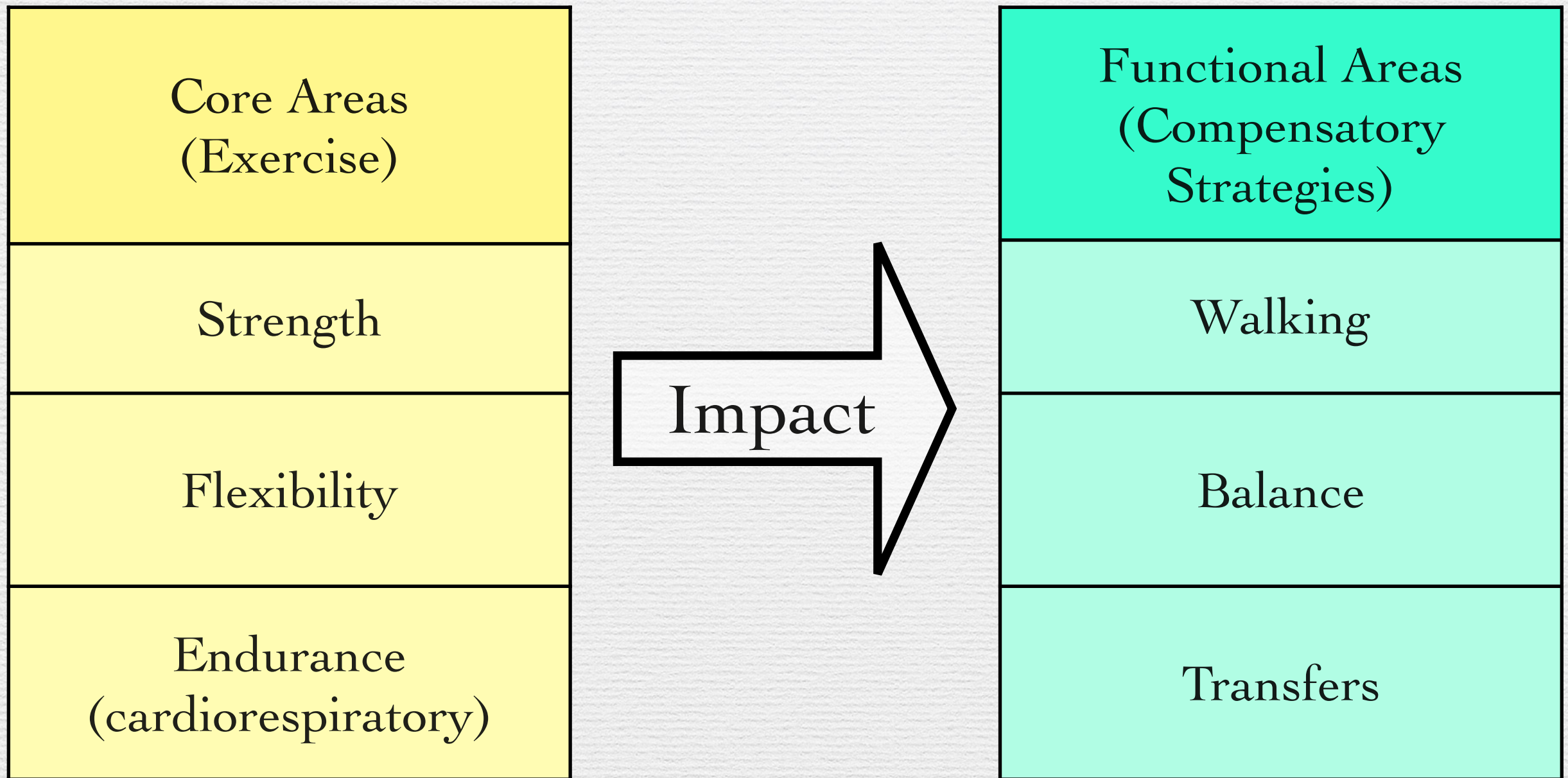
- ❧ Address potential problems before they become real problems
- ❧ Guide you how to walk better
- ❧ Guide you how to perform transfers with less difficulty
- ❧ Guide you how to improve your balance OR compensate for it
- ❧ Guide caregivers how they can safely help with less strain

Physical Therapy Can:

IMPORTANT

- Establish an individualized exercise program which is safe and effective for you so you can keep moving at your best -
 - Stretching
 - Strengthening
 - Endurance
 - Balance/compensatory strategies

Areas of Focus

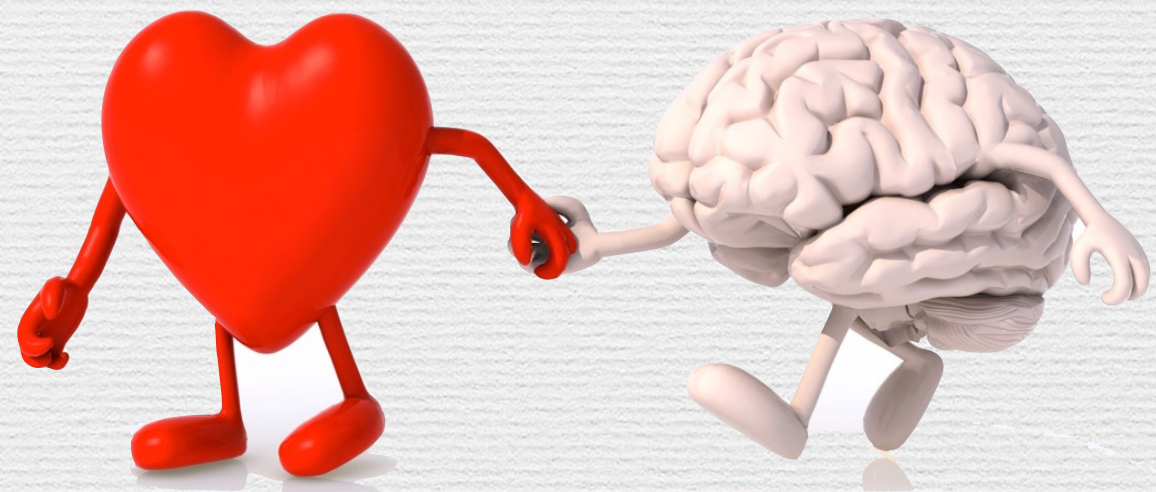


- ◆ Core areas will impact functional areas
- ◆ Both areas are addressed in therapy

Endurance

- Endurance - activities such as walking longer distances at a reasonable speed are needed to walk outside of your home with less limitations
- Therapist will help determine the mode of exercise and intensity levels which are safe for you yet challenging

Research is showing
'What's good for the heart
is good for the brain'

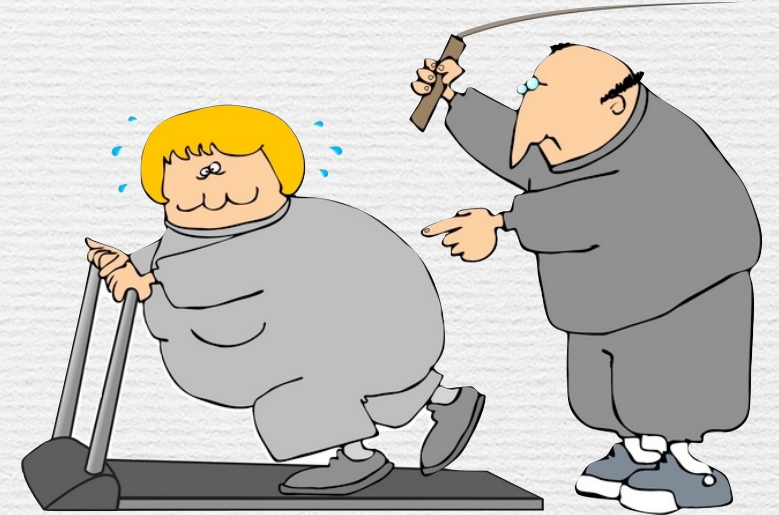


Aerobic Exercise: How Much if Moderate?

- CDC Minimal Physical activity guidelines:
 - 150 minutes of moderate exercise per week or 30 minute/5x per week.
- What is Moderate Intensity?
 - You can talk but not sing
 - Rating of perceived exertion 'somewhat hard'

RPE = HR + breathing rate + sweating + muscle fatigue

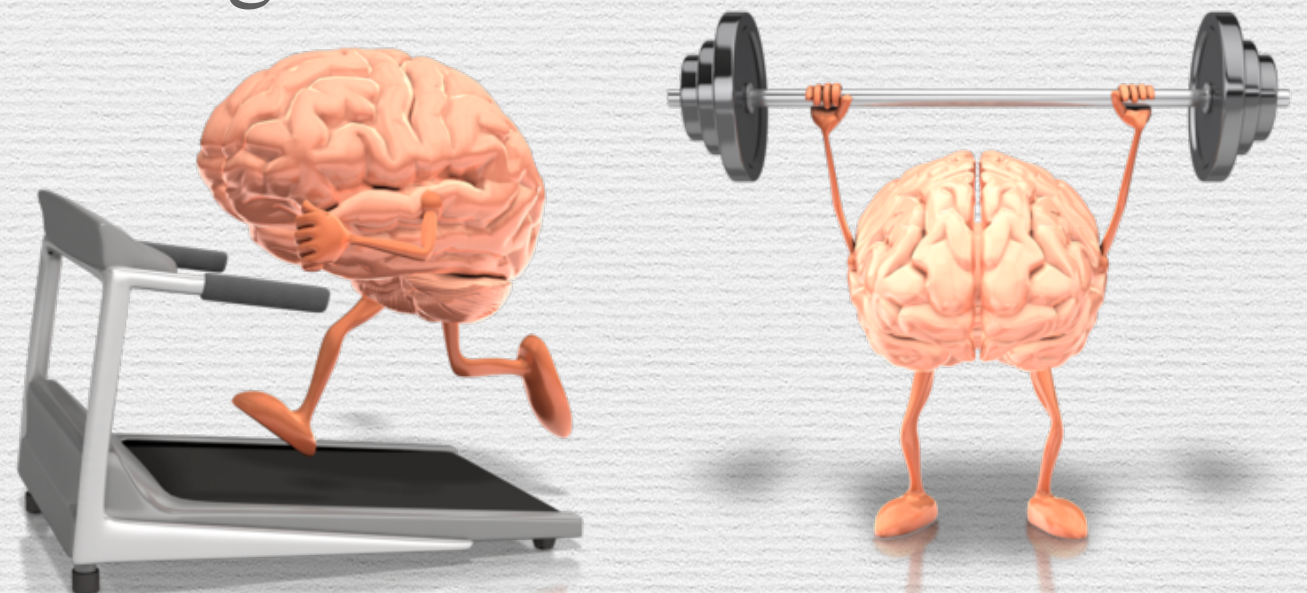
Aerobic Exercise: Vigorous?



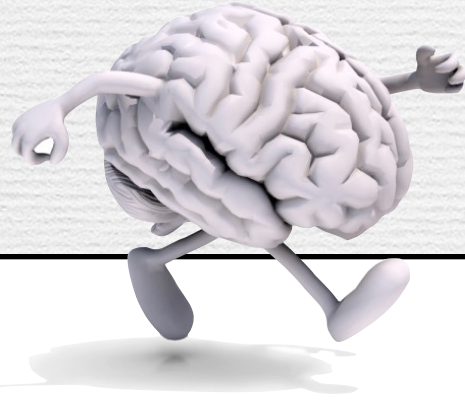
- What is Vigorous Intensity?
 - You will not be able to say more than a few words without needing to pause for a breath
 - Rating of perceived exertion 'very hard'
- Difficult to motivate people at this level long term
- Increased risk of injury if older or unable to tolerate due to other medical/orthopedic problems

Aerobic Exercise: Needs To Be Individualized

- ❧ Higher intensity exercise has shown to improve brain 'strength' and function (promotes survival of nerve cells and communication between nerve cells at the molecular level)
- ❧ Can improve cognition
- ❧ Exercise intensity is relative to your current physical condition and dosing should be tailored to your level



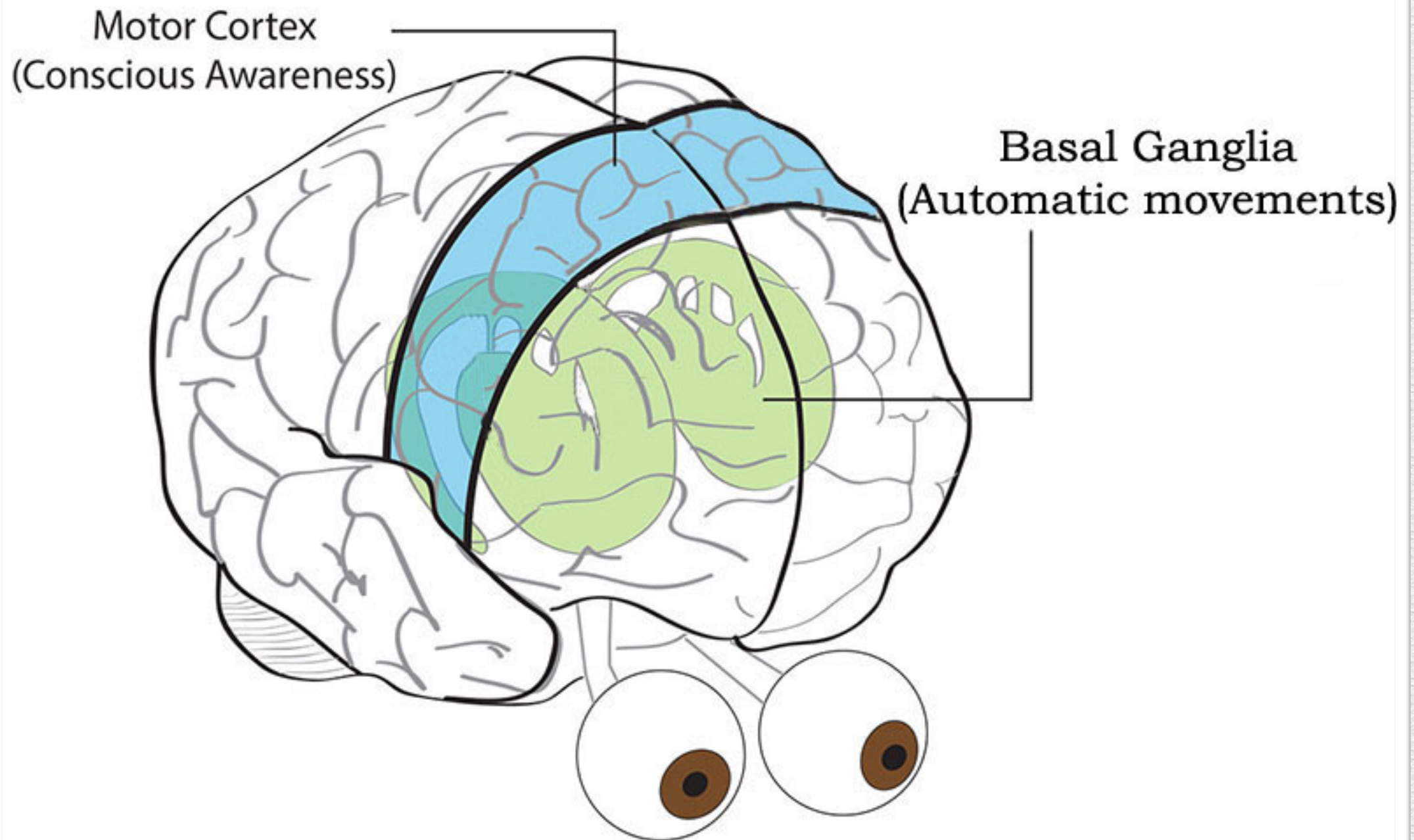
Ways To Challenge Yourself



Exercise Options

Walking further than what you are accustomed/ monitor with a pedometer	Walking faster than what you are accustomed provided you are steady and maintain a good step size
Nordic walking poles for fitness / Trekking poles for hiking	Walking up hill
Water aerobics	Swimming
House work	Gardening
Dancing Ballroom/Tango	Boxing
Bicycling	Qigong/Tai Chi

Compensatory (New) Strategies

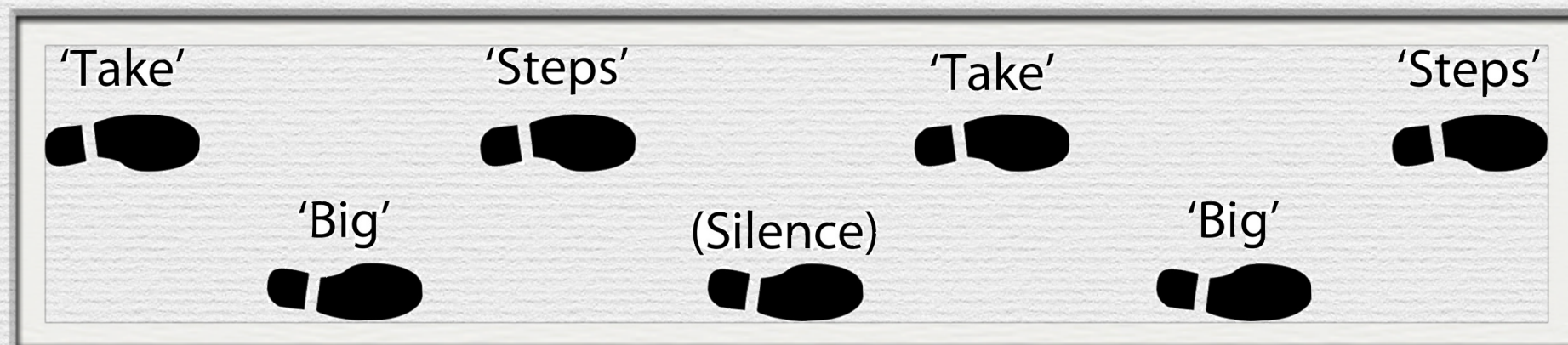


Compensatory (New) Strategies

- ❧ Paying Attention
- ❧ Using Music
- ❧ Movement strategies
 - ❧ Body mechanics
 - ❧ Breaking down movements

‘Attention’ Strategy For Walking

- Try different phrases and establish a rhythm
 - ‘Take big steps’
 - ‘Take long steps’
 - ‘Heel down first’
- Use the one that works best for you



Where Can Help With Balance



A



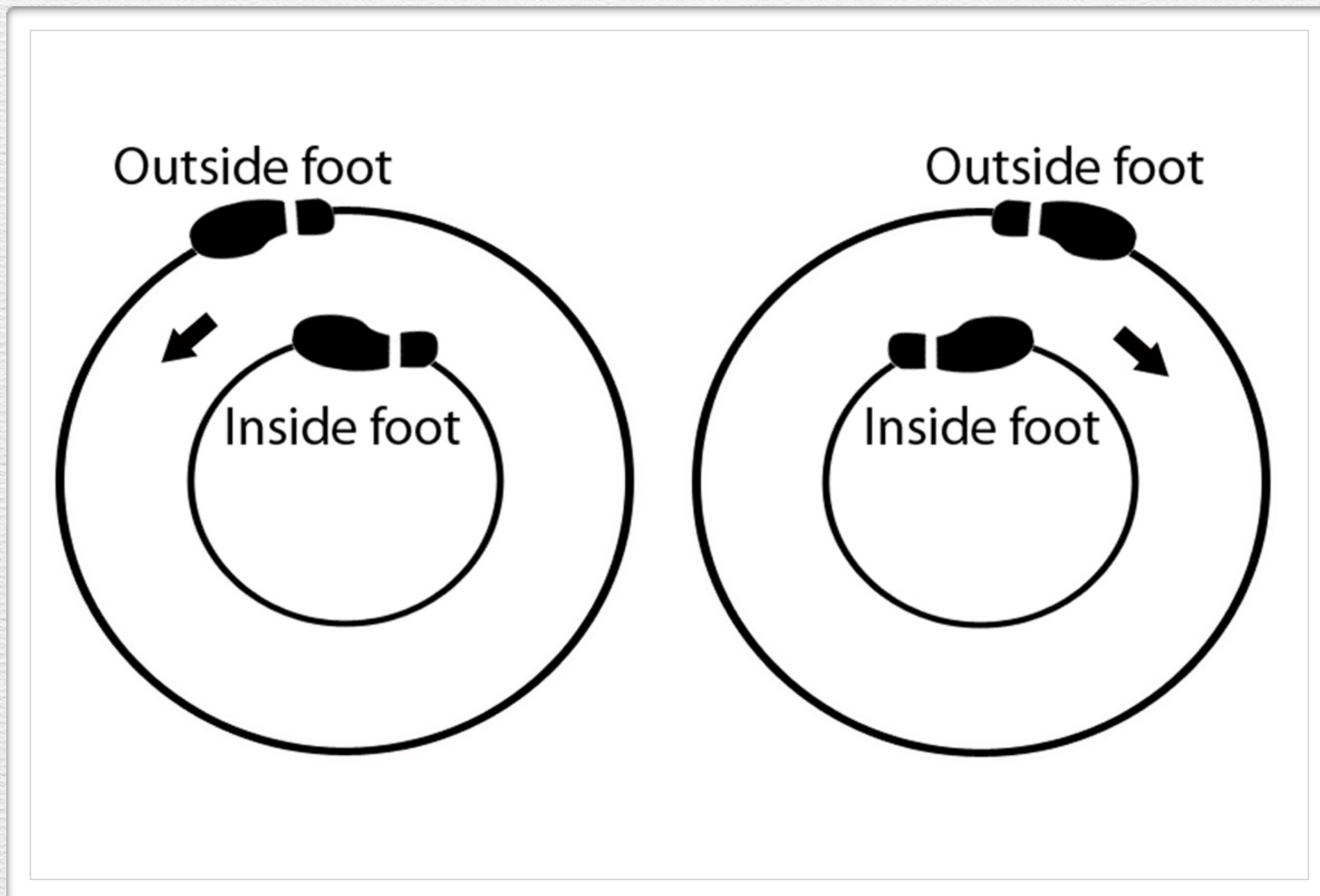
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Using Music To Improve Walking

- ❧ Music uses different parts of the brain to normalize your walking
- ❧ Improves:
 - ❧ Size of your step
 - ❧ Freezing
 - ❧ Rhythmicity of walking
- ❧ Therapy will help guide your needs



Strategy for Turns



Turns & Freezing

(pre/post intervention)



Movement Strategy for getting up from a chair



Scoot Forward



Feet Back



Lean Forward



Facebook Parkinson's Online Chat Group

(over 7,000 members)

Outside of your medications, what have you
tried that has helped you the most?

Over 60 people responded

How Did People Respond?

- Approximately 95% of the people with PD utilized some form of exercise to improve their PD symptoms
- A few did not mention exercise but mentioned reducing or avoiding stress
- A few mentioned staying active + DBS

Types Of Exercises

- Walking/pool walking/nordic walking → Jogging
- Chair yoga → Gentle yoga → Vigorous yoga
- Sitting exercises → standing aerobic exercises
- Gardening/walking on the beach / horse back riding
- Mindful exercises such as Qigong or Tai Chi which involves: posture, mental focus, breathing techniques
- Weight training and stretching

Combination Responses

- ❧ Exercise + healthier diet + better sleeping
- ❧ Keep moving + stay positive
- ❧ Try to stay active + crafts/ hobbies
- ❧ Exercise + nordic walking + biking + kind people
- ❧ Exercise + laughter + better sleep + faith
- ❧ Staying active + DBS

Who's in Charge of What?

THERAPIST



- 1) Guide you on what you need
- 2) Help you succeed

YOU



- 1) Let us know what is important to you
- 2) Do the work